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EXAMINER	
FAN, CHIEH M	

ART UNIT	PAPER NUMBER
2634	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/731,500	MASTRANGELO, GIUSEPPE	
	Examiner	Art Unit	
	Chieh M Fan	2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 December 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 December 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *04202001*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. In fact, the drawings of the present application do not show any features recited in each of the independent claims. For example, at least the device that performs the step of measuring the power level, the broadcast data receiver, and the amplitude correction filter recited in claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of

the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 7-13 and 16 are objected to because of the following informalities:

Regarding claim 7, "the receiver control system" should be changed to --- a receive control system ---; "the installation procedure" in line 9 should be changed to --- an installation procedure ---; and "the same" in line 10 should be changed to --- the receiver ---.

Regarding claim 10, "the receiver" in line 2 should be changed to --- a receiver --.

Regarding claim 12, "the inductors" in line 3 should be changed to --- inductors ---.

Regarding claim 16, "the group" in line 3 has been changed to --- a group ---.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5-13 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "the relative power difference" and "the linearization circuit" in line 2 and 3, respectively. There is insufficient antecedent basis for these limitations in the claim.

Claim 6 recites the limitation "the relative signal strength" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the incoming frequency signal" in line 7. There is insufficient antecedent basis for this limitation in the claim. It is not clear which signal is referred as the incoming frequency signal.

Claim 10 recites the limitation "the specified criteria" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the high end signal and low end signal" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "the specified criteria" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "the extent and level" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 5-9, 11, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaku et al. (EP 0798875, listed in the IDS filed 4/20/01, "Kaku" hereinafter).

Regarding claim 1, Kaku teaches a method of installation of a receiver to receive broadcast data which is broadcast to the location of the receiver (col. 3, lines 21-32, col. 4, lines 7-10), said method comprising: measuring the power level of incoming frequency signals at two predetermined spaced points on the signal band by measuring the content of automatic gain control converters within the receiver (col. 4, lines 11-19, col. 8, lines 17-21), providing an amplitude correction filter which can be selectively operated at the radio frequency input to the broadcast data receiver to allow the correction of amplitude variations with frequency, the selective operation of the filter dependent upon and responsive to the power level measurements obtained (col. 8, lines 29-34).

Regarding claim 2, wherein obtaining the power level measurements occurs automatically and is followed by any required correction as pad of an automatic installation procedure (col. 4, lines 7-10, col. 36, lines 13-21).

Regarding claim 3, wherein two measurements are taken, referred to as the high end signal and the low end signal (col. 8, lines 17-21).

Regarding claim 5, wherein if the relative power difference is greater than a predetermined level then the linearization circuit is utilized to adjust the power level to said broadcast data receiver so that the incoming signal is within a known power range (col. 25, lines 6-19).

Regarding claim 6, the method utilizes the ability to use the relative signal strength rather than absolute signal strength to install the receiver (col. 8, lines 29-34).

Regarding claim 7, Kaku teaches an apparatus for receiving broadcast digital data which is transmitted and received by the apparatus and passed to the receiver via an radio frequency input from the data carrying network (col. 3, lines 21-32, col. 4, lines 7-10), said receiver comprising: a linearization circuit which can be selectively activated to operate with the receiver control system upon comparison of measurements of the power levels at two predetermined points on the incoming frequency signal and, if the comparison reveals a difference which is greater than a predetermined level, the linearization circuit is activated to adjust the receiver settings during the installation procedure for the broadcast data receiver at a location at which the same is to be subsequently used (col. 8, lines 17-21 and 29-34, col. 25, lines 2-19).

Regarding claim 8, wherein said receiver is connected to a data supply network in which the data is carried by a cable network (col. 1, lines 4-6).

Regarding claim 9, wherein said linearization circuit is selectively activated automatically by said receiver control system upon specified criteria for activation being met (col. 25, lines 2-19).

Regarding claim 11, wherein said linearization circuit performs cable slope correction internally in said broadcast data receiver and this can be applied to improve the performance of the broadcast data receiver at the location of installation (col. 25, lines 6-19).

Regarding claim 14, Kaku teaches a method of installation of a receiver to receive digital data which is broadcast to the location of the receiver (col. 3, lines 21-32, col. 4, lines 7-10), said method comprising: measuring the power level of incoming frequency signals at two predetermined spaced points on the signal band (col. 4, lines 11-19, col. 8, lines 17-21), providing means for the comparison of the measurements and if the comparison shows a value within a predetermined parameter an indication is provided to the installer and if the comparison shows a value out with the predetermined parameter a control system in the receiver adjusts the operation of one or a combination of components within the receiver until the value is within the predetermined parameter (col. 8, lines 17-21 and 29-34, col. 25, lines 2-19).

Regarding claim 15, wherein the extent and level of adjustment is made with reference to at least one algorithm in the control system (col. 25, lines 2-19, Figs. 24, 25, 27).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 12, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaku et al. (EP 0798875, listed in the IDS filed 4/20/01, "Kaku" hereinafter) in view of Bazes et al. (U.S. Patent No. 5,991,339, "Bazes" hereinafter).

Regarding claims 12 and 16, Kaku teaches the claimed invention (see the rationale applied to claims 11 and 14 above), but does not particularly teach changing the values of the inductors, capacitors and/or resistors to obtain one of a number of equalization slopes to bring the difference between the high end signal and low end signal within a specific margin.

However, the use of adjustable inductors, capacitors and/or resistors to control the frequency response of an equalizer is well known in the art. Bazes teaches an adaptive equalizer that can adapt to various transmission medium lengths and signal degradation levels (abstract). The transfer function of the equalizer may be controlled by the adjustment signal that specified the resistance value (col. 2, lines 63-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to adjust the values of resistors to control the frequency

response of the equalizer such that the equalizer can adapt to various transmission medium lengths and signal degradation levels.

Regarding claim 13, Kaku in view of Bazes does not teach that the specific criteria is for a difference between the high end and the low end signal values greater than 10 dB. However, the selection of the difference value as the specific criteria would not change the operation of the system of Kaku/Bazes. Such value is arbitrarily selectable to meet the system requirement such as error tolerance of the error caused by attenuation. Therefore, the claimed value of 10 dB is clear a matter of design choice, dictated by the system requirement and user's need.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaku et al. (EP 0798875, listed in the IDS filed 4/20/01, "Kaku" hereinafter) in view of Leung et al. (U.S. Patent No. 6,542,540, "Leung" hereinafter).

Kaku teaches the claimed invention (see the rationale applied to claim 1 above), but does not particularly teach that no linearization via the filter is performed if the high end signal level is greater than the low end signal level. However, whether to perform linearization for a particular situation is merely a design option, dictated by the user's error tolerance for the error caused by the attenuation. Leung teaches that high frequency boost is not required when the high frequency attenuation is relatively small (col. 6, lines 1-3). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made not to perform linearization when the high frequency is small, so as to reduce the cost and initialization of the modem.

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaku et al. (EP 0798875, listed in the IDS filed 4/20/01, "Kaku" hereinafter) in view of Porter et al. (U.S. Patent No. 6,167,081, "Porter" hereinafter)

Kaku teaches the claimed invention (see the rationale applied to claim 8 above), but does not particularly teach that the install activates the linearization circuit upon receiving an indication that specified criteria have been met. However, such feature is well known in the art. Porter teaches a receiver that activates the equalizer when receiving an indication that specified criteria have been met (col. 6, lines 50-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the feature of activating linearization circuit as claimed, so as to activate the linearization circuit only when required and consequently to save the cost and time caused by the linearization circuit.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kaku et al. (U.S. Patent No. 5,963,593), Park (U.S. Patent No. 5,953,373).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chieh M Fan whose telephone number is (571) 272-

3042. The examiner can normally be reached on Monday-Friday 8:00AM-5:30PM, Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Chieh M Fan
Primary Examiner
Art Unit 2634

cmf
September 14, 2004